NAVSUP
NAVAL SUPPLY SYSTEMS COMMAND

SPEC OPS
SAN DIEGO, CA

UNITED STATES NAVY SERIAL NUMBER TRACKING
SNT

SNT

www.snt.navsup.navy.mil

Ready. Resourceful. Responsive!

MATT MULLINS
CDR, USN
19 AUG 2003

Outline

Outline

- Background/Overview
- Implementation
  - System Access
  - AIT
- Demonstrations
- Aviation Rollout
- Military Standards (Product, Package, Contracts, IRRD)
- Web Site - Reports
- Future / Initiatives
- Summary

How SNT Got Started

Aviation Maintenance-Supply Readiness (AMSR) Review – 1998

Challenge:

- ↓ Lower Maintenance & Supply Cost

- ↑ Increase Readines

System Concept

Definition:

Closed-loop, cradle-to-grave tracking of maintenance critical, serialized components, providing asset visibility and material status, and enabled by automatic identification technology (AIT)

Plan:

Collect data through interfaces with various supply and maintenance systems and provide access to stakeholders via a Virtual Shared Data Warehouse

System Concept

Major Benefits

Maintenance

- Identify Maintenance Deficiencies
- Measure Reliability
- Accurate Record Configuration
- Determine Training Requirements
- Assist Engineering Investigations

Supply

- Assess Repair Turn Around Time
- Decrease Misidentification and Lo
- Warranty Management
- Predict Parts Requirements
- Better Procurement Decisions
- Measure Reliability
- Achieve Total Asset Visibility

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SNT Foundation

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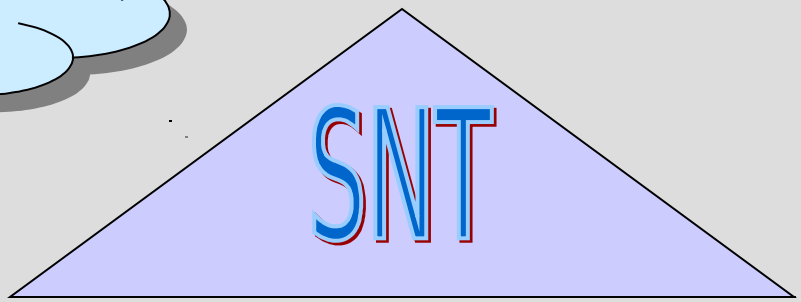
Implementation

SNT requires two components



FIRST

Live access to databases via the SNT Web-enabled portal.

Data Base Access

- WMRIL/A-ORS
- eRMS/WMPS
- UICP
- WEB-CAV
- CAV-ORM
- CAV-Navy
- FACTS
- OOMA/OIMA
- R-Supply
- IBS

AIT

- CMB
- 2D Data matrix
- 2D PDF417
- ISO15418/15434
- MILSTD129
- MILSTD130
- MSL
- IRRD

SECOND

Automatic Identification Technology (AIT) is used by SNT to maintain data accurac

Aviation Asset/Information Flow

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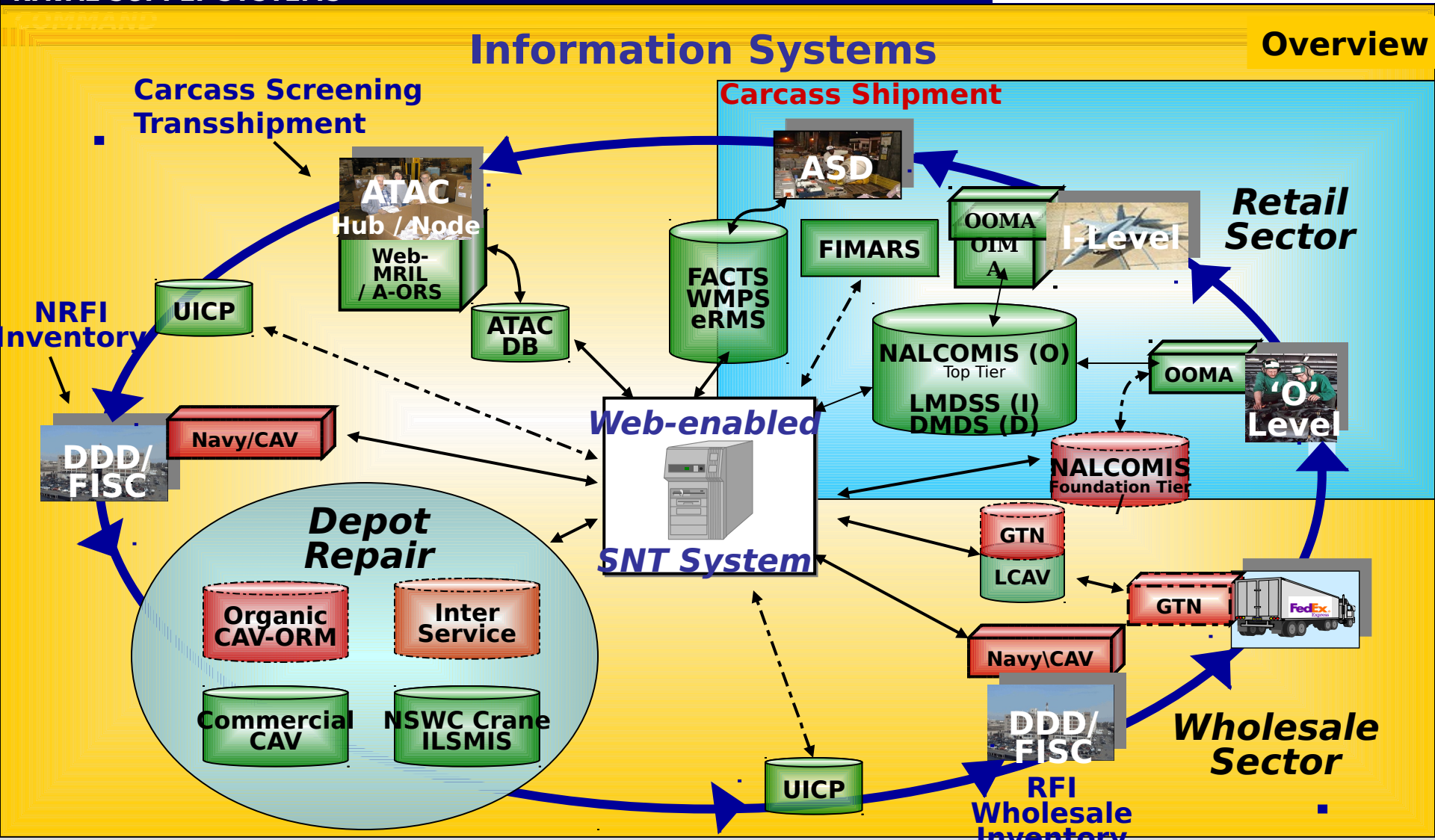
Information Systems

Overview



Connectivity | Not Connected | S/N | No | Asset Flow

CMB

AIT

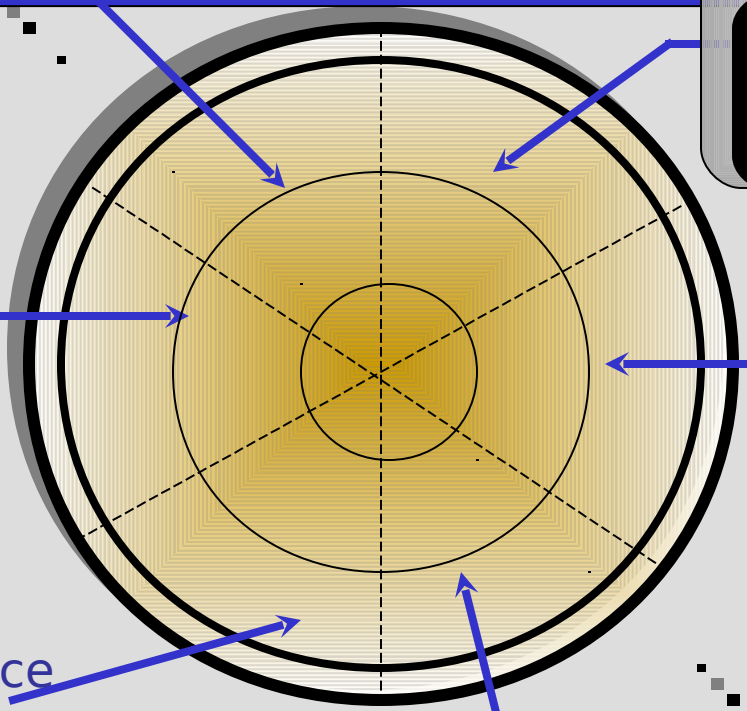
Contact Memory Button (CMB)

Scheduled Removal Component Card

Name Plate Data

Computer, Air Data CPU-175/A

P/N	50-100-01	SERNO	0152
MFR	K0656	CONTR	F33657-85C-0025



Maintenance History**

Warranty Data

CMB Stats:
- 2k,8k,32k
- ~$7-$13 each
- Read/Write
- Dual CMB/BC Reader $1200

**Use TBD within aviation maintenance

Available for Vendor Use

Available for Future Navy Use

Demonstrations

Demonstrations

- H-60/HSL-40
- SCADC
- SQQ-32 SONAR
- HOSS Camera (AN/SXY-1)
- CAMS II A5 MODULE on SUBMARIN

Supply - Aviation 5 Year Plan

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Aviation Rollout

T/M/S	Total Number Aircraft	Components per Aircraft	Total Number of Components (W/ 25% spares)	Total CMB Cost	Contractor Installation Cost	Total Engineering Document Cost	Total AIT Cost
MH-53E	46	170	9,775	$152,783.25	$272,412.00	$136,000.00	$605,932.55
CH-53E	164	170	34,850	$544,705.50	$817,236.00	$136,000.00	$1,597,820.10
CH-53D	44	104	5,720	$89,403.60	$272,412.00	$83,200.00	$486,995.50
[illegible]H-60	342	300	128,250	$2,004,547.50	$3,268,944.00	$240,000.00	$5,665,423.90
[illegible]3B	111	400	55,500	$867,465.00	$708,271.20	$320,000.00	$1,712,510.98
EA-6A/B	26	469	9,380	$146,609.40	$163,447.20	$375,200.00	[illegible]
[illegible]	94	196	47,530	$742,893.90	$898,959.60	$156,800.00	$1,757,972.50
[illegible]H-1N	126	132	20,790	$324,947.70	$599,306.40	$105,600.00	[illegible]
[illegible]46E	280	70	20,125	$314,553.75	$926,200.80	$56,000.00	$1,383,946.57
CH/HH-46	79	70	6,913	$108,042.38	$435,859.20	$56,000.00	$609,546.56
EA-6B	124	144	22,320	$348,861.60	$1,035,165.60	$115,200.00	$1,659,147.94
MV/CV/HV-22	458	203	116,218	$1,816,479.53	$3,922,732.80	$162,400.00	$6,254,890.39
AV-8	172	921	198,015	$3,094,974.45	$871,718.40	$736,800.00	$4,899,087.53
F-14A/B/D	193	200	48,250	$754,147.50	$871,718.40	$160,000.00	$1,940,564.86
P-3's	264	75	24,750	$386,842.50	$1,797,919.20	$60,000.00	$2,452,987.68
Cargo	295	175	64,531	$1,008,623.44	$2,724,120.00	$140,000.00	$4,297,527.69
Trainers	515	129	83,044	$1,297,973.81	$817,236.00	$103,200.00	$2,399,150.46
E-2C	75	145	13,594	$212,470.31	$1,525,507.20	$116,000.00	$1,963,874.10
C-2A	38	145	6,888	$107,651.63	$217,929.60	$116,000.00	$461,500.85
F-18ABCD	745	200	186,250	$2,911,087.50	$4,794,451.20	$160,000.00	$8,327,383.34
F-18EF	548	240	164,400	$2,569,572.00	$2,179,296.00	$192,000.00	$5,205,021.20
Misc Support							$2,805,000.00
Total			1,267,091	$19,804,636.24	$29,120,842.80	$3,726,400.00	$58,211,345.83

Total # of Items marked 1,267,091

SNT Implementation Cost = $58,211,346

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Steps to Marking Parts

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Aviation Rollout

- Identify Parts to be Marked
- Get Approval
- Update Drawings & Technical Manuals & Directives
- Provide Configuration & ILS Support
- Establish Plan for Marking
  - Plane Side
  - Warehouse (Wholesale & Retail)
  - Amend Repair Contracts/ New Items for Supply

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Contracts

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Package marking

Cage: 02059
PN:102770-351
Ser: 6694
NSN 7025011415888
CONT: N00104-98-T-0023
Name: Magnetic Tape
U/I: EA
QTY: 1

Mil-Std 129 PDF417
2D
ANSI MH 10

Product Marking

Nameplate Data

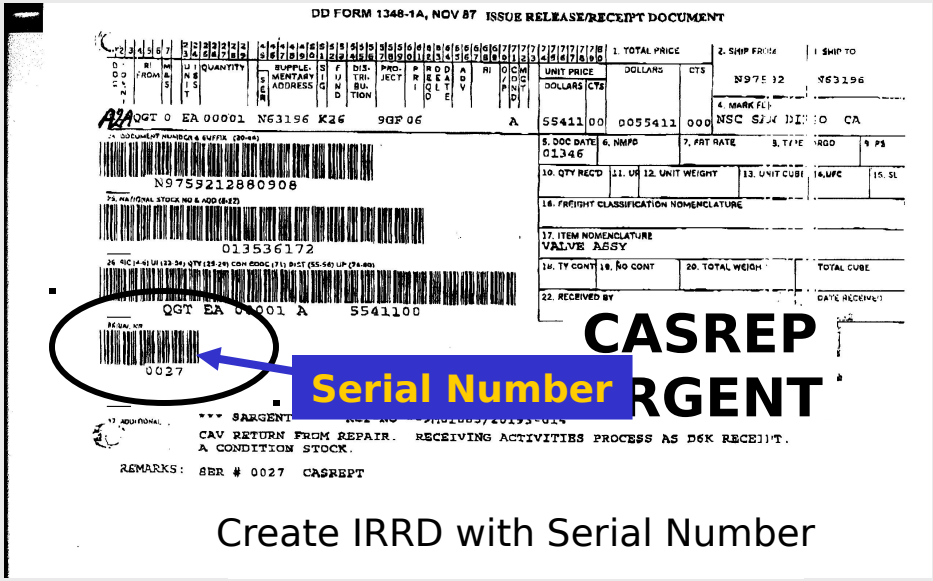
CMB

CAGE: V23456
PN: 33489-12
NSN: 5835-01-141-5888
S/N: 45367
Cont: N00383-02-G010N-0017
Name: Main Rotor Blade

2D

AIT

Invoices



Create IRRD with Serial Number

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Retrograde from Customer

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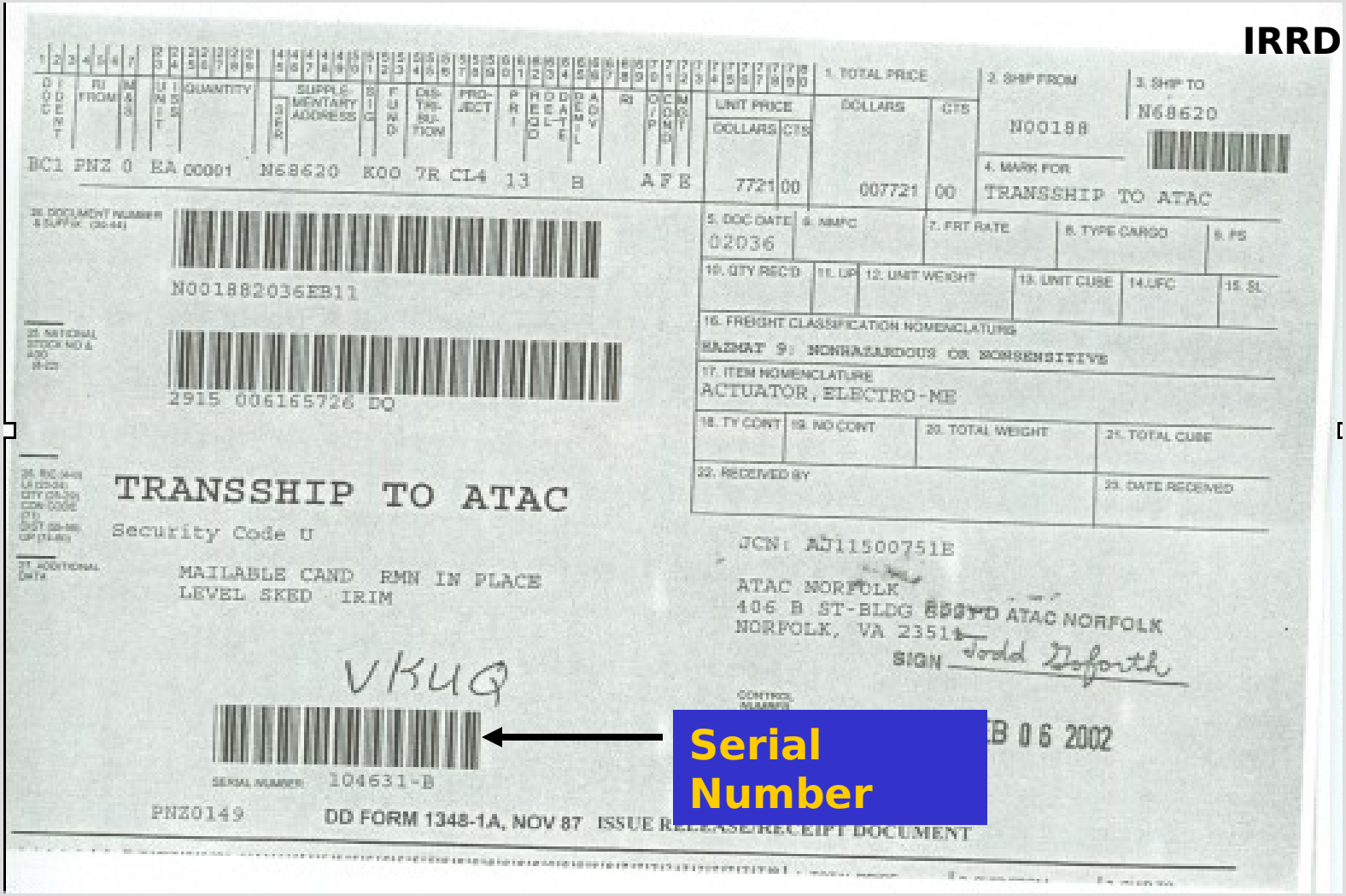
IRRD – AIT



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Retrograde to DD

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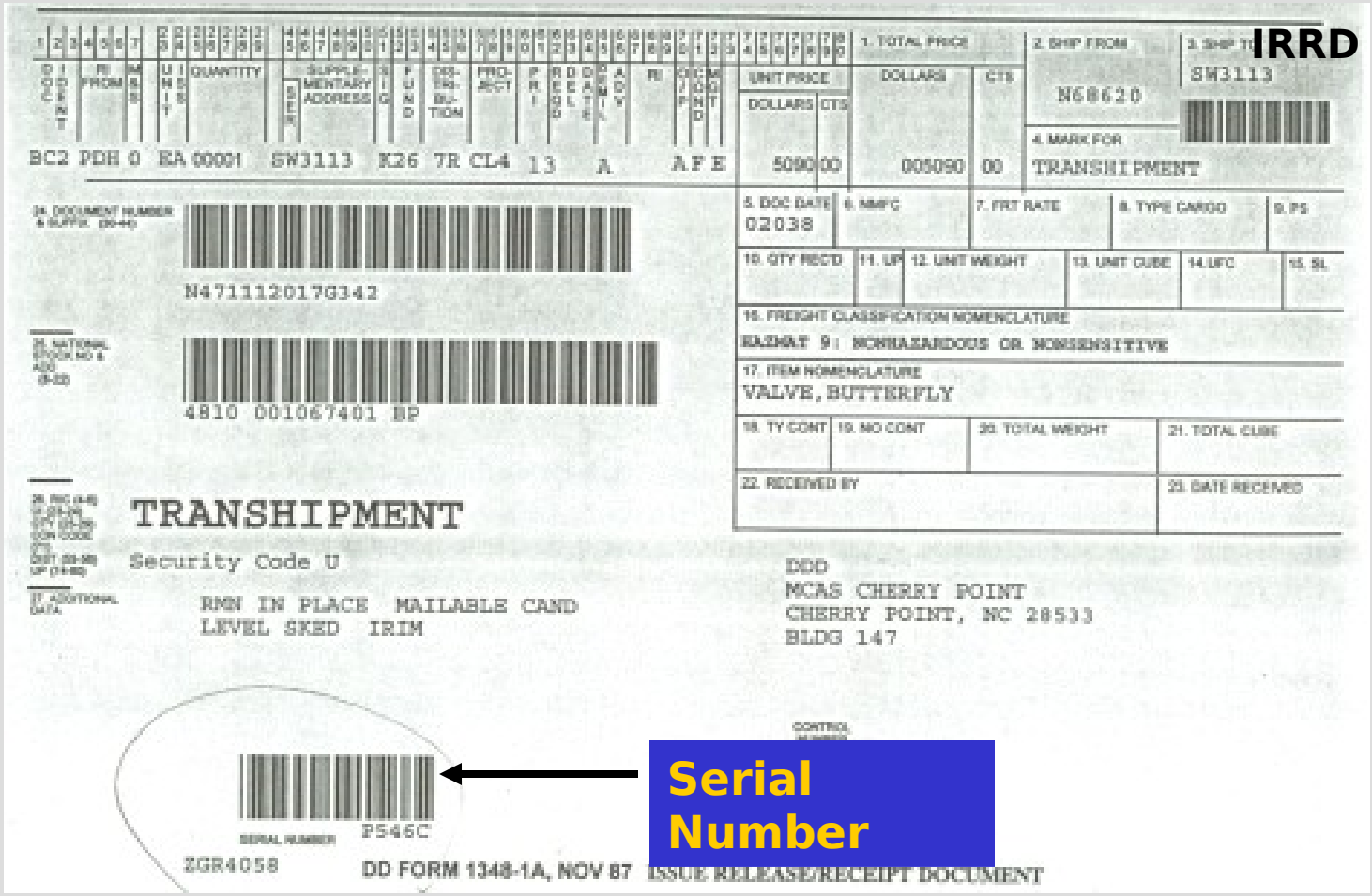
IRRD – AIT



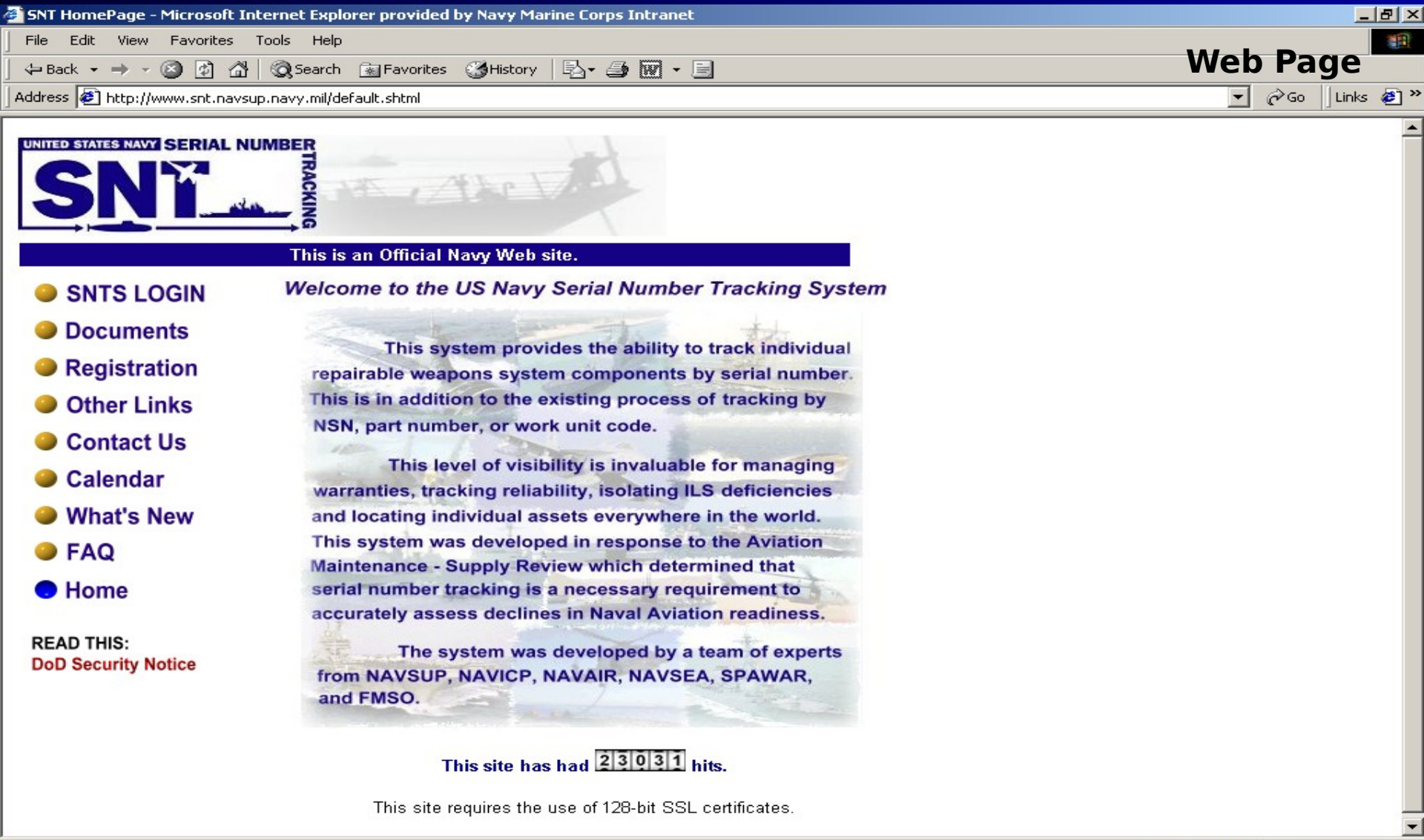
Serial Number

SNT Homepage

NAVAL SUPPLY SYSTEMS

UNITED STATES NAVY SERIAL NUMBER TRACKING SNT

Web Page


SNT HomePage - Microsoft Internet Explorer provided by Navy Marine Corps Intranet
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://www.snt.navsup.navy.mil/default.shtml
Go Links
UNITED STATES NAVY SERIAL NUMBER TRACKING SNT
This is an Official Navy Web site.
SNTS LOGIN
Documents
Registration
Other Links
Contact Us
Calendar
What's New
FAQ
Home
READ THIS:
DoD Security Notice
Welcome to the US Navy Serial Number Tracking System
This system provides the ability to track individual repairable weapons system components by serial number. This is in addition to the existing process of tracking by NSN, part number, or work unit code.
This level of visibility is invaluable for managing warranties, tracking reliability, isolating ILS deficiencies and locating individual assets everywhere in the world. This system was developed in response to the Aviation Maintenance - Supply Review which determined that serial number tracking is a necessary requirement to accurately assess declines in Naval Aviation readiness.
The system was developed by a team of experts from NAVSUP, NAVICP, NAVAIR, NAVSEA, SPAWAR, and FMSO.
This site has had 23031 hits.
This site requires the use of 128-bit SSL certificates.
Internet
Start
Microsoft PowerPoint

www.snt.navsup.nav

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SNT Web Page Query Results

UNITED STATES NAVY SERIAL NUMBER TRACKING SNT

SNT Web Page

SNTS \ Asset Visibility \ Retrograde - Microsoft Internet Explorer provided by Navy Marine Corps Intranet

File Edit View Favorites Tools Help

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Address https://www.snt.navsup.navy.mil/queries/AssetVisibility/Retrograde/default.shtml

Go Links

Asset Visibility

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Retrograde

Queries | Decision Support | Administration | User Options | Help | Feedback | Log Out

Asset Visibility | Aviation Maintenance | In Transit | Inventory | Shipboard Engineering | Warranty

Printer Friendly Version

Search Criteria

Serial Number:

Document Number:

UIC / DODAAC: R03363

NIIN:

Lead TCN:

Search Reset

<< Back to Asset Visibility

Submit a Batch Query

	Origin	xShip / ATAC Hub or Node	xShip / ATAC Hub or Node	DOP/DSP
Document Number	R033633089G746	R033633089G746	R033633089G746	R033633089G746
NIIN	010228572	010228572	010228572	010228572
Serial Number	2024	2024	2024	2024
Quantity	1	1	1	1
Condition Code	F	F	F	F
Activity	R03363 USS KITTY HAWK	N4179A FISC YOKOSUKA ATAC DETACHMENT	N46433 ATAC HUB North Island, CA	SW3205
Date Received	N/A	28 May 2003	09 Jun 2003	09 Jun 2003
Ship To	N46433 SUPPLY OFFICER	N46433 ATAC HUB North Island, CA	SW3205	N/A
Date Shipped	18 Apr 2003	28 May 2003	09 Jun 2003	N/A
LTCN	N/A	R033633089G746RXX	R033633095G702XXX	N/A
Transportation Mode	N/A	F - Air, Air Mobility Command	T - Air, Air Freight Forwarder	N/A
RCDN	N/A	N/A	N/A	
Signature	N/A			G.ARELLANO
(Data Source)	FACTS	ATAC	ATAC	ATAC/CAV

Internet

Start | ICP Mech - Micro... | \\naeamechfs01v... | SNTS \ Asset Vi... | Document1 - Micr... | 10:42

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Reliability

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SNT Web Page

SNTS \ Aviation Maintenance \ Reliability - Microsoft Internet Explorer

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Address https://www.snt.navsup.navy.mil/queries/AviationMaintenance/Reliability/default.shtml Go Links

Decision Support

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Reliability

Strong candidate

Queries | Decision Support | Administration | User Options | Help | Feedback | Log Out

Asset Visibility | Aviation Engineering | Aviation Maintenance | Inventory | Shipboard Engineering | Shipboard Maintenance | Warranty

Search Criteria

Serial Number:

Part Number: 680800-14

CAGE Code:

Type Model Series:

Search Reset

<< Back to Aviation Maintenance

Sort: <NONE> Ascending Sort

Export to Microsoft® Excel®

Printer Friendly Version

	Serial Number	Part Number	CAGE Code	CAGE Name	Type Model Series	Total BCMs	Total Transactions
1	000	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
2	0000	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
3	00000	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
4	187	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
5	1EHL011	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
6	4KBP005	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	0
7	54672	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
8	68080014	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	0
9	765	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	0
10	B0B049	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
11	C0105	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
12	CAQ-003	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	0
13	CHK00008	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	5
14	CHK008	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	4
15	CRL00027	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
16	CXH-005	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
17	CXH00005	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1

Done Internet

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SNT Web Page Query Results

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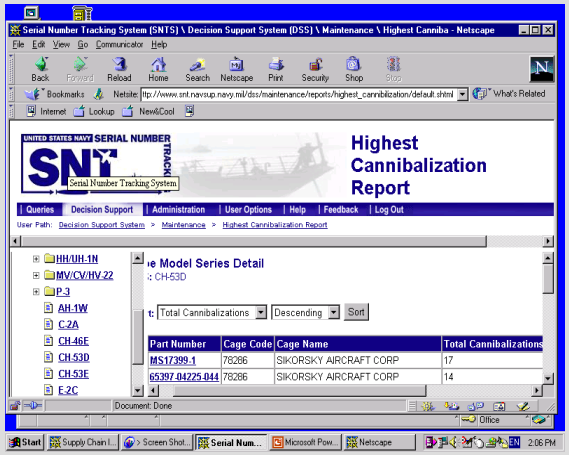
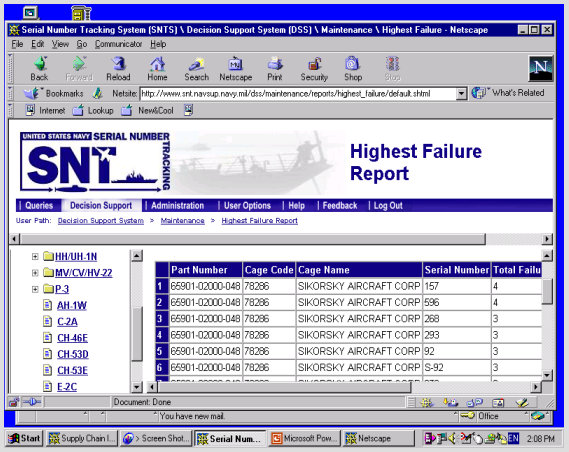
SNT Web Page

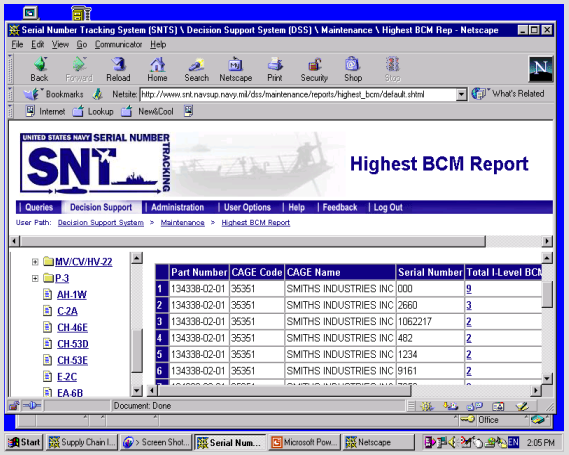
Decision Suppor

Generate, Collect & Analyze Maintenance Data

SNT Existing Reports







Additional Reports – Top Cost Driver, Top Degraders

Carcass Tracking Watch

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UNITED STATES NAVY SERIAL NUMBER TRACKING SNT

SNT Web Page

Serial Number Tracking System (SNTS) \ Decision Support Module (DSM) \ Retrograde \ Carcass Tra - Microsoft Internet Explorer p
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://www.snt.navsup.navy.mil/dss/retrograde/carcass_tracking/add_watch_form.shtml?action=add_form&watch_type=1
Go Links
UNITED STATES NAVY SERIAL NUMBER TRACKING SNT
Carcass Tracking Watches
Queries Decision Support Administration User Options Help Feedback Log Out
User Path: Decision Support Module > Retrograde > Carcass Tracking
Add New Carcass Watch
Document Number
R03363 - 3072 - G660 -
Timeframe:
Past 90 days
Email Notifications
Email Notifications will be sent to pamela.szymczak@navy.mil. Do you wish to receive Email Notifications for this Carcass Watch?
Yes
No
Add Cancel
Internet
Start
Inbox - Microsoft ...
Serial Number T...
Pitches
Microsoft Excel - 7...
Microsoft PowerP...
10:53

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Carcass Watch Notification

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SNT Web Page

Dear _____
This is an email notifying you of the status of your Carcass Watches:
Document Number: N00188-3155-GC23
NIIN: 008773277
Serial Number: 16740
Condition Code: F
Quantity: 0
Shipped From: N00188 - NAVAL AIR STATION OCEANA
Date Shipped:
LTCN:
Transportation Mode: -
Ship To: N68620 - ATAC HUB Norfolk, VA
Date Received:

NIIN: 008773277
Serial Number: 16740
Condition Code: F
Quantity: 1
Shipped From: N68620 - ATAC HUB Norfolk, VA
Date Shipped:
LTCN: N001883155GC23XXX
Transportation Mode: T - Air, Air Freight Forwarder
Ship To: SW3142
Date Received: 2003-06-05

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Wholesale System Reporting S/N

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Future

Coming Soon
DSS Reports SN of Selected Items For Receipts/ Issues

Web-enabled

SNT System

SNT WEB Site Accesses Navy Repository

DDNV 12/8/02– 3/3/03
DDDC/DDCN 1/12/03 – 3/3/03

Receipts	W/ SN	W/O SN
DDNV	6	22
DDDC	193	112
DDCN	493	201
Issues		
DDNV	15	9
DDDC	95	164
DDCN	470	314

Navy Repository

Maritime Focus

DATA BASE ACCESS:

- CDMD-0A
  - Display Shipboard Configuration Data
- LCAV
  - In Transit Query

INITIATIVES:

- GPETE – Working with NAVSEA Code 04L52
- Ship Configuration Validation – Working with NAVSEA Code 04L51
- Rapid Securing Device (RSD)
- AN/UYQ-70
- AEGIS Tubes
- MK92 TWT
- BARCO ATDC monitors and COHU cameras (Tomahawk).
- Digital Modular Radio System

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SIM / SNT Parallel Goals

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Summary

DRID 54

Optimize Logistics Processes to Minimize Customer Wait Time (CWT) using Variance Based Metrics	Customer Confidence In a Simplified Priority System With Time Definite Delivery	Total Asset Visibility Through Use of AIT, Shared Data Environment and Other Applications	Real-Time, Actionable, Web-Based Logistics Information Systems
FY02	FY02	FY04	FY04

Complements

- SUPER REG
- SIM Directive
- ADC 44 & 89
- DoD UID Policy – 29 JUL 03

Navy Enterprise Team Ships

Supply Maintenance Aviation Reengineering Team SMART ERP NAVSUP ★ NAVAIR

Summary

- SNT Project well underway
- SNTS Web Application on line – accessing live data
  - Decision Support and Reliability Modules
- Prototypes completed - proven concept
- Complying with DOD directives
- SNT is a part of (and complements) TAV

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Shipboard Asset/Information Flow

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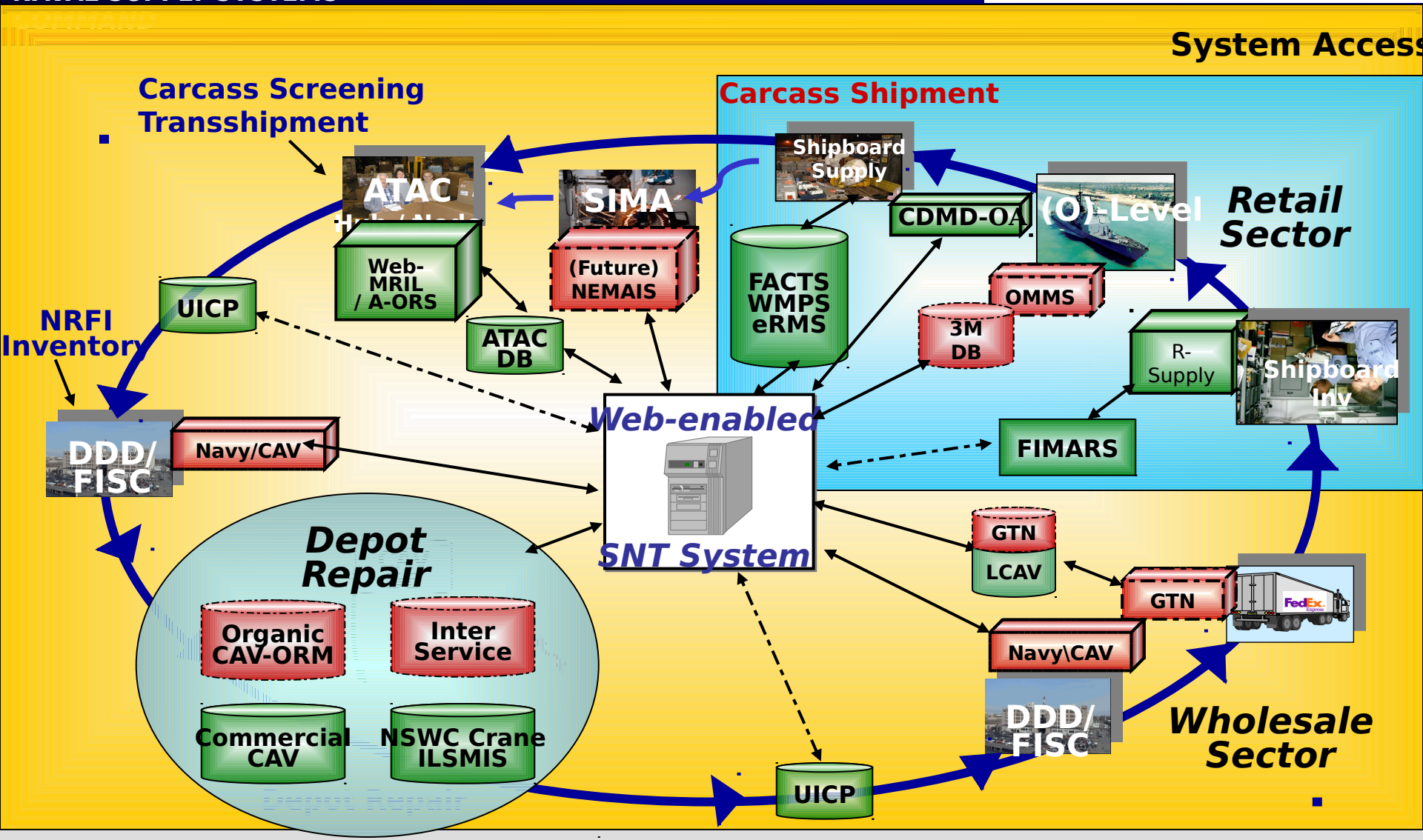
System Access



Connectivity | Not Connected | S/N | No | Asset Flow